

**RESPONSE UNDER 37 CFR §1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 3738**

REMARKS

Upon entry of the above amendments, this application will contain claims 27-29 pending and under consideration.

Objection to the Specification under 37 CFR 1.75(d)(1)

The specification was objected under 37 CFR 1.75(d)(1) and MPEP 608.01(o) as allegedly failing to provide antecedent basis. The requirement in this regard is that “the claims must find clear support or antecedent basis in the description.” 37 CFR 1.75(d)(1). As explained in the previous office action response, the amendments to claim 27 are clearly supported by the specification as it stands, particularly in view of page 24, lines 3-15 (paragraphs [0074]-[0076] as published) and FIGS. 13-16. With that support, the above-noted requirement of Rule 75 has been met, and no further amendments to the specification are believed to be necessary.

Nevertheless, so as to leave no doubt, the specification has been amended as identified above. The text of the specification as filed clearly describes and enables cutting of cortical bone on an interior portion of the vertebrae, within the peripheral boundaries of the vertebrae. Page 16, lines 13-14 of the specification as filed (paragraph [0050] as published) further notes that the implant can be located “approximately in the middle of the vertebra body,” in one embodiment. Figures 13-16 show insertion of an implant in an intervertebral space so that the ends of the implant are within the peripheral boundaries of the vertebrae. No new matter has been added.

Consequently, in view of the original text and the amendments made herein, the Examiner is respectfully requested to withdraw his objection to the specification.

Claim Rejections under 35 USC §102

Claims 27-29 were rejected under 35 USC §102 over Godefroy et al. (US 5,683,463). Respectfully, Godefroy does not show all aspects of claim 27. As one example, Godefroy does not show “an upper, first surface and a lower, second surface extending arcuately along the longitudinal axis from the first terminal part to the second terminal part.” The Godefroy reference shows a series of embodiments in which arcuate surfaces or curvature is around the longitudinal axis, not along that axis. To the extent Fig. 5 of Godefroy can be understood, with

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its suggestion of holes 9, 10, 11 and 12 as being present, yet the sectional drawing shades them in, and its lack of definition of “ovoidal,” it is submitted that that Figure does not unequivocally show all elements of claim 27.

In addition, that figure does not and could not show an arcuate surface from one terminal part to another due to the interference of and reliance on Godefroy’s “rib” 16. Toothed rib 16 in the middle of the Godefroy implant is believed to be required by the disclosure. The specification requires at least one rib on the implant, and each embodiment in Godefroy includes two holes (e.g. 9 and 10) on a side, separated by an implant surface. That surface is not necessary if middle rib 16 could be done away with. Moreover, the middle rib appears to be the most important from a mechanical standpoint, since it would always be embedded in the vertebrae for Godefroy’s purpose of preventing rotational and translational motion of the implant with respect to the vertebrae. Regular pivotal motion of the vertebrae (25 and 26 in Godefroy’s Figure 5) with respect to each other could separate or loosen the connection between the vertebrae and the outside ribs. Further, Figure 5 of Godefroy shows a groove in which rib 16 sits. Thus, removing rib 16 would not only work against the specification, but also would not provide an arcuate surface from one terminal part to another along the longitudinal axis, as any such arcuate surface would be interrupted by that middle groove.

Accordingly, the Examiner is respectfully requested to withdraw the rejection of claim 27 over the Godefroy reference. That reference does not show or suggest all aspects of claim 27.

Claim Rejections under 35 USC §103

Claim 28 was rejected under 35 USC §103(a) over Godefroy in view of Thomas et al. (US 5,925,056). Claim 28 is allowable for substantially the same reasons noted above with respect to claim 27. Godefroy does not show or suggest all aspects of independent claim 27, and the Thomas reference does not fill in those gaps. In particular, Thomas does not show an implant of any kind, much less one having arcuate surfaces that extend along the longitudinal axis from a first terminal part to a second terminal part.

Claim 28 is also allowable because neither Thomas nor Godefroy show or suggest removing bone with “a tool having a cutting portion including a pair of generally parallel

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EXAMINING GROUP 3738**

opposing surfaces, each surface having a first arcuate cutting edge corresponding to the upper surface of the implant and an opposite second arcuate cutting edge corresponding to the lower surface of the implant.” In Figures 3 and 4 of Thomas, for example, only cutting edges 22 are shown, one of which is at bottom-front and one is at top-back of Figure 3. To the extent there are any “opposing surfaces” in Thomas, such surfaces must be the top and bottom arced surfaces of Figure 4. Those surfaces have only one cutting edge 22 on them, whereas claim 28 recites that “each surfaces ha[s] a first arcuate cutting edge . . . and an opposite second arcuate cutting edge.” Further, edges 22 in Thomas appear to be substantially linear, as opposed to the arcuate edges recited in the claim. For at least these reasons, the Thomas and Godefroy references, even if properly combinable, do not show or suggest all aspects of claim 28.

Claim 29 was rejected under 35 USC §103(a) over Godefroy in view of Henry (US 5,766,252). For at least the reasons noted above with respect to claim 27, this claim is also allowable. The Henry reference does not show the aspects of claim 27 that are missing in the Godefroy reference. Accordingly, this rejection of claim 29 should be withdrawn as well.

The amendments to the claims noted above have not been made to overcome a rejection. Rather, they have been made to address typographical errors made in previous presentations of the claims. No narrowing of subject matter has been made or is intended.

In conclusion, entry of the above amendments and consideration of the following remarks are respectfully requested. Applicant acknowledges that the amendment of any finally rejected claims cannot be entered as a matter of right. However, Applicant urges that these amendments place this case in condition for allowance or in better form for appeal. Upon entry of the above amendments, this application will contain claims 27-29, pending and under consideration.

Respectfully submitted,

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